GROUND WATER QUALITY BUREAU (GWQB)
DISCHARGE PERMIT RENEWAL and MODIFICATION
EXISTING COPPER MINE FACILITY
Issued under 20.6.2 and 20.6.7 NMAC

Certified Mail No:
Return Receipt Requested

Mine Facility Name:	Little Rock Mine
GWQB Discharge Permit No.:	DP-1236
GWQB TEMPO AI No.:	571
Permittee Name/Responsible Party:	Freeport-McMoRan Tyrone Inc.
Mailing Address:	P.O. Drawer 571 Tyrone, NM 88065
Mine Facility Contact:	Lee Nix; (575) 912-5777
Mine Facility Location:	Highway 90 South Tyrone Mine Road Tyrone, NM 88065
County:	Grant County
Permitting Action:	Renewal and Modification
Effective Date:	DATE
Expiration Date:	DATE
NMED Permit Contact	Brad Reid; (505) 372-8533
E-mail Address	Brad.Reid@state.nm.us

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John Rhoderick, Acting Director
Water Protection Division

Date

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Part A GENERAL INFORMATION

A100 Introduction

A. The New Mexico Environment Department (NMED) issues this renewal and modification of Groundwater Discharge Permit, DP-1236 (Discharge Permit or DP-1236) to Freeport-McMoRan Tyrone Inc. (permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 (Ground and Surface Water Protection) and 20.6.7 NMAC (Ground Water Protection – Supplemental Permitting Requirements for Copper Mine Facilities; aka the Copper Mine Rule). NMED is issuing this Discharge Permit to control the discharge of water contaminants from the Little Rock Mine for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.

B. Pursuant to this Discharge Permit, the permittee is authorized to discharge stormwater, process water, and impacted groundwater entering the Little Rock Open Pit. Fluids captured in the Little Rock Open Pit are pumped through a high-density polyethylene (HDPE) pipeline referred to as the Little Rock Sump Pipeline to the synthetically lined 1X1 Pond. Seepage captured in seepage collections systems located at the toe of the reclaimed Copper Leach Stockpile flows by gravity through a High-Density Polyethylene (HDPE) pipeline to the Little Rock Sump Pipeline north of the Little Rock Pit. The 1X1 Lined Pond regulated pursuant to this Discharge Permit also collects fluids from the 1X pump back system and 1A Tailing Dam seepage collection system regulated pursuant to the Supplemental Discharge Permit for Closure (DP-1341). These discharges may move directly or indirectly into groundwater of the State of New Mexico that has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC. The discharge may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.

C. The permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which requires compliance with 20.6.2 NMAC and 20.6.7 NMAC and is enforceable by NMED.

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A101 Applicable Regulations

A. The permittee is discharging from a facility that meets the definition of "existing copper mine facility." Sections 20.6.2.3000 through 20.6.2.3114 NMAC and 20.6.7 NMAC apply to discharges specific to copper mine facilities and their operations.

B. The discharge from the facilities regulated pursuant to this Discharge Permit are not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

C. Groundwater quality as observed in monitoring wells required by Section C108.D of this Discharge Permit is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC except those excluded pursuant to Subsection D of 20.6.7.24 NMAC.

A102 Permit Duration

A. Pursuant to the WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit is **five (5) years** from the effective date.

B. If the permittee submits an application for renewal in accordance with Subsection F of 20.6.2.3106 NMAC and the permittee is not in violation of the discharge permit on the date of its expiration, then the existing discharge permit shall not expire until NMED approves or disapproves the application for renewal.

A103 Terms of Permit Issuance

A. **Permit Fees** - As a discharge permit associated with Freeport-McMoRan Tyrone Inc., the permittee shall remit an annual permit fee payment equal to the applicable permit fee based on mine size listed in Subsection A of 20.6.7.9 NMAC on August 1 of each year until termination of all discharge permits for the Tyrone Mine. [20.6.7.9.A NMAC]

B. **Transfer of Discharge Permit** - Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, the permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice. The permittee shall deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. [20.6.7.38 NMAC and 20.6.2.3111 NMAC]

C. **Permit Renewal** - To renew this Discharge Permit, the permittee shall submit an application and associated fees for renewal at least 270 days prior to the

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expiration date of this Discharge Permit in accordance with Section 20.6.7.9, Section 20.6.7.10, and Section 20.6.7.11 NMAC.

D. **Additional Conditions** - In addition to the requirements of 20.6.7 NMAC, the permittee shall comply with the following additional conditions as authorized by Subsection I of 20.6.7.10 NMAC pursuant to WQA 74-6-5: Conditions C100.C, C100.D, C101.F, C106.A, C109.D, and C110.D.1.

Part B FACILITY SPECIFIC INFORMATION

B100 History and Facility Description

A. The Little Rock Mine is an open pit copper mine owned by Freeport-McMoRan Tyrone Inc. that underwent intermittent mining in the 1960s and 1970s. Historic mining-related features at the mine include the open pit area, historic non-ore waste rock stockpiles, and the reclaimed leach stockpile and associated precipitation plant. Reclamation of the Copper Leach Stockpile and precipitation plant area was completed in 2010 in accordance with plans approved by NMED and the Mining of the Energy, Minerals, and Natural Resources Department. The reclaimed Copper Leach Stockpile contains about 1.7 million tons of primarily copper oxide ore that was leached with sulfuric acid solutions during the early 1970's and contains residual acidity from the leach solutions.

B. The Little Rock Open Pit walls contain sulfide minerals which when oxidized generate acidic solutions. These acidic solutions react with in situ minerals to produce acid rock drainage (ARD) that contain metals and sulfate in elevated concentrations above the standards of Section 20.6.2.3103 NMAC. Regional groundwater flows from the Little Rock Open Pit to the Tyrone Mine Main Pit where it is captured and pumped into the Tyrone process water circuit.

C. The Little Rock Open Pit has been advanced below the regional groundwater table and groundwater and surface water runoff that flows into the pit is collected in temporary sumps and pumped via pipeline to the 1X1 lined pond from where it is pumped to the Tyrone Mine for use as process water. After cessation of mining and pumping is discontinued the water table will recover to form a flow through pit lake. During mining and following closure surface water from California Gulch will flow into the open pit. Leach ore mined from the open pit is transported over a constructed haul road to the Tyrone Mine and placed on permitted leach stockpiles for leaching.

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D. Existing waste rock stockpiles include the North In-Pit Waste Rock Stockpile, the West In-Pit Waste Rock Stockpile, and the historic West Canyon Waste Rock Stockpile, all of which do not generate water contaminates and have been determined by NMED to be conditionally exempt.

E. The permittee utilizes flow meters to measure regulated discharge volumes pursuant to this Discharge Permit and as required by the Copper Mine Rule. Flow meters utilized by DP-1236 are described in Table 10 of the Tyrone Master Document (TMD).

B101 Permit Modification

A. The modification of DP-1236 consists of authorization to expand the Little Rock Open Pit from approximately 328 acres to approximately 448 acres and deepening of the pit to an elevation of approximately 5,050 feet above mean sea level (amsl). The expansion will increase the pit boundary footprint by approximately 120 acres.

B102 Permitting History

A. The Discharge Plan for DP-1236 includes the Discharge Permit Renewal Application dated June 10, 2020, the Updated Closure/Closeout Plans for the Little Rock Mine dated July 21, 2010, June 19, 2014, and June 11, 2020, Amendments to the 2009 Mining Plan of Operations dated September 2013 and October 2, 2020, the Groundwater Flow and Geochemical Modeling report dated July 2, 2014, and the Geochemical Modeling Update dated July 29, 2020. As part of the application process, the permittee also provided a document dated October 6, 2015 referred to as the Tyrone Master Document (TMD) which addresses Copper Mine Rule application requirements and is applicable to all Tyrone Mine discharge permits, including DP-1236. The Discharge Plan for the Little Rock Mine also includes the original Mine Plan of Operations (MPO) dated October 28, 1993, and the original Closure/Closeout plan dated September 30, 1999. In addition, the Discharge Plan includes applicable information and materials submitted as part of the original Discharge Plan approved on December 27, 2000; renewed on June 24, 2004; amended on April 19, 2013 and May 13, 2015; renewed and modified on March 8, 2016; amended on January 11 and February 19, 2018 and July 9, 2021.

B103 Facility Location, Groundwater and Process Water Characteristics

A. The mine units regulated pursuant to DP-1236 are located approximately 10 miles southwest of Silver City at the Tyrone Mine in Sections 16, 17 and 20, T19S, R15W, Grant County, New Mexico.

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B. Groundwater beneath the mine units regulated pursuant to DP-1236 ranges from approximately 0 to 320 feet beneath the ground surface and had a pre-discharge total dissolved solids concentration range of approximately 200 to 300 milligrams per liter.

C. Process water and impacted stormwater discharges regulated pursuant to DP-1236 are typically outside the acceptable range for pH and contain TDS, sulfate, and certain metals in concentrations that exceed water quality standards of Section 20.6.2.3103 NMAC.

B104 Authorized Mine Units

A. This Discharge Permit contains requirements associated with the following mine units as identified in the Discharge Plan. All mine units listed below meet the definition of "existing" mine units pursuant to the Copper Mine Rule unless otherwise noted. The existing major mine units regulated pursuant to DP-1236 are shown in Figure 1.

1. Waste Rock Stockpiles

a. West In-Pit and North In-Pit Waste Rock Stockpiles – The West In-Pit and North In-Pit Waste Rock Stockpiles are approved to be expanded to maximum footprints of approximately 81 and 60 acres respectively. Waste rock used to construct the stockpiles comes from the Little Rock Open Pit and will be selected in accordance with the NMED approved Waste Rock Characterization and Handling Plan dated June 6, 2016 (Characterization Plan). Pending adherence to the Characterization Plan the expanded stockpiles are not expected to generate water contaminates and are conditionally exempt. The location and approved footprints of the West In-Pit and North In-Pit Waste Rock Stockpiles are shown in Figure 2.

b. NRW Waste Rock Stockpile – The NRW Waste Rock Stockpile is located north of the Little Rock Open Pit adjoining the existing North In-Pit Stockpile. The approved footprint of the NRW Waste Rock Stockpile is approximately 107 acres. Waste rock used to construct the NRW Waste Rock Stockpile comes from the Little Rock Open Pit and will be selected in accordance with the Characterization Plan. Pending adherence to the Characterization Plan the stockpile is not expected to generate water contaminates and is conditionally exempt. The location and approved footprint of the NRW Waste Rock Stockpile is shown in Figure 3.

c. East In-Pit Waste Rock Stockpile – The East In-Pit Waste Rock Stockpile is on the east side of the Little Rock Open Pit and overlaps a portion of the

existing Little Rock Haul Road. The approved footprint of the East In-Pit Waste Rock Stockpile is approximately 26 acres. Waste rock used to construct this stockpile comes from the Little Rock Open Pit and will be selected in accordance with the Characterization Plan. Pending adherence to the Characterization Plan the stockpile is not expected to generate water contaminates and is conditionally exempt. The location and approved footprint of the East In-Pit Waste Rock Stockpile is shown in Figure 3.

d. Historic West Canyon Stockpile – The Historic West Canyon Stockpile is located west of the reclaimed Cooper Leach Stockpile and P-Plant Area and occupies a footprint of approximately 1.5 acres. The location of the West Canyon Stockpile is shown on Figure 1.

2. Reclaimed Copper Leach Stockpile and Reclaimed P-Plant Area

   a. The reclaimed Copper Leach Stockpile and reclaimed P-Plant Area are located south of the Little Rock Open Pit. Acidic seepage is collected in synthetically lined seepage collection trenches CLDS and CLDS-1. The reclaimed Copper Leach Stockpile and P-Plant area occupy approximately 31 acres. The location and footprint of the reclaimed Copper Leach Stockpile is shown on Figure 1 and Figure 5.

3. Northern Haul Road

   a. The approved Northern Haul Road is located northeast of the Little Rock Open Pit. Waste rock used to construct the haul road comes from the Little Rock Open Pit and will be selected in accordance with the Characterization Plan. Pending adherence to the approved Characterization Plan the Northern Haul Road is not expected to generate water contaminates and is conditionally exempt. The location of the existing haul road and footprint of the Northern Haul Road is shown in Figure 4.

4. Little Rock Mine Open Pit

   a. The authorized extent of the Little Rock Mine Open Pit is approximately 448 acres with an approximate bottom elevation of 5,050 feet amsl. The authorized extent of the Little Rock Mine Open Pit is shown in Figure 5.

5. Impoundments

   a. 1X1 Lined Pond – The 1X1 Lined Pond has a surface area of approximately 0.75 acres, is synthetically lined with an 80 mil HDPE liner, and has a capacity of approximately 1,899,000 gallons. The 1X1 Lined Pond receives

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stormwater and groundwater from the Little Rock Open Pit and seepage from Seepage Collection Systems CLDS and CLDS-1. The 1X1 Lined Pond also receives fluids from the reclaimed 1A Tailing Dam and the 1X pump back system. Fluids are pumped from the 1X1 lined pond to the 10 Canyon Fiberglass Tanks and from there into the Tyrone Mine process circuit.

6. Sumps, Tanks, Pipelines and Other Containment Systems

   a. CLDS and CLDS 1 Seepage Collection Trenches – The synthetically lined CLDS and CLDS- 1 Seepage Collection Trenches are located at the toe of the reclaimed Copper Leach Stockpile and collect seepage from the reclaimed Copper Leach Stockpile. Seepage collected in the trench's gravity flows through an HDPE pipeline to the HDPE Little Rock Sump Pipeline Pit Dewatering Pipeline and to the 1X1 Lined Pond. The seepage collection trenches are shown in Figure 6.

   b. Little Rock Groundwater Collection Sump – The temporary, unlined Little Rock Groundwater Collection Sump is located in the Little Rock Open Pit. Groundwater and stormwater runoff is pumped from the collection sump to small unlined temporary sumps in the Little Rock Open Pit and from there the groundwater is pumped to a lined temporary booster sump located in the west portion of the pit from where it is pumped to 1X1 Lined Pond.

   c. Pipelines – Pipelines serving mine units regulated pursuant to DP-1236 consist of HDPE material and range in size from 8 to 16 inches in diameter. The pipelines are described in Table 8 of the TMD.

B105 Authorized Discharges

A. The permittee is authorized to discharge water contaminants from the following mine units in accordance with all applicable system design and operational constraints as described in this Discharge Permit, and the Discharge Plan. [20.6.2.3109 NMAC]

   1. The permittee is authorized to discharge groundwater and impacted stormwater from the Little Rock Open Pit, 1X Pumpback System fluids, and 1A Tailing Dam Seepage Collection System fluids to the 1X1 Lined Pond. The 1X Pumpback System and 1A Tailing Dam Seepage Collection System are regulated pursuant to the Tyrone Mine Supplemental Permit for Closure, DP-1341.

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2. The permittee is authorized to expand the Little Rock Open Pit from approximately 328 acres to approximately 448 acres and deepen the pit to a bottom elevation of approximately 5,050 feet above mean sea level (amsl).

3. The permittee is authorized to operate unlined temporary sumps located within the Little Rock Open Pit and the lined temporary booster sump in the west portion of the Little Rock Open Pit.

4. The permittee is authorized to operate the CLDS and CLDS-1 Seepage Collection Trenches to collect seepage from the Reclaimed Copper Leach Stockpile.

5. The permittee is authorized to use water from various sources that meet Section 20.6.2.3103 NMAC groundwater standards for dust suppression.

6. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges such as spills or leaks must be reported to NMED and remediated as required by Section 20.6.2.1203 NMAC, and any additional requirements listed in this Discharge Permit.

7. The permittee shall provide written notice to NMED of the commencement, or recommencement of construction, discharge, or mining in accordance with Subsection C of 20.6.7.18 NMAC.

Part C FACILITY SPECIFIC REQUIREMENTS

The permittee shall conduct operations in accordance with the requirements set forth below to ensure compliance with 20.6.2 NMAC.

C100 Little Rock Open Pit

A. The Little Rock Open Pit shall be operated in accordance with the applicable requirements of Section 20.6.7.24 NMAC.

B. Pursuant to Subsection A of 20.6.7.24 NMAC expansion of the Little Rock Open Pit shall not exceed the area as shown on Figure 5 of this Discharge Permit. The permittee must obtain a permit modification or amendment from NMED prior to expanding the Little Rock Open Pit beyond the area shown on Figure 5.

C. The permittee shall review and reevaluate or calibrate the existing geochemical model as necessary using available data to determine if applicable standards will

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be met at closure. The results of the existing pit lake model review shall be provided with the application for renewal of DP-1236.

D. Any expansion of the Little Rock Open Pit must be in accordance with relevant approvals from the New Mexico Mining and Minerals Division pursuant to the New Mexico Mining Act and any appropriate federal land management agency (e.g., Bureau of Land Management).

C101 Waste Rock Stockpiles

A. The permittee shall comply with applicable operational requirements listed in Paragraphs (2) through (8) of 20.6.7.21.D NMAC including the requirement to place waste rock on waste rock stockpiles in a manner that considers implementation of the copper mine facility closure plan pursuant to Subsection A of 20.6.7.18 and 20.6.7.33 NMAC.

B. Waste rock from the Little Rock Open Pit shall be handled in accordance with the Characterization Plan and in accordance with the applicable requirements of 20.6.7.21 NMAC.

C. Pursuant to Paragraph (1) of 20.6.7.21.D NMAC and Paragraph (1) of 20.6.7.21.B NMAC, the NRW and East In-Pit Waste Rock Stockpiles shall not exceed the footprints shown on Figure 3 attached to this Discharge Permit. The permittee may only expand the footprint of the waste rock stockpiles for the purpose of facility closure as approved through the Little Rock Mine Updated Closure/Closeout Plan. The permittee shall submit a request for a permit modification or amendment to NMED for approval, as described in D107, prior to expanding waste rock stockpile limits beyond the areas shown on Figure 3.

D. Pursuant to Paragraph (1) of 20.6.7.21.D NMAC and Paragraph (1) of 20.6.7.21.B NMAC expansion of the North In-Pit and West In-Pit Waste Rock Stockpiles shall not exceed the footprints shown on Figure 2 attached to this discharge permit. The permittee may only expand the footprint of the expanded waste rock stockpiles for the purpose of facility closure as approved through the Little Rock Mine Updated Closure/Closeout Plan. The permittee shall submit a request for a permit modification or amendment to NMED for approval, as described in D107, prior to expanding the waste rock stockpile limits beyond the areas shown on Figure 2.

E. Any new waste rock stockpiles must be evaluated in accordance with the requirements of Section 20.6.7.21 NMAC and may be subject to additional requirements as applicable.

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F. Any expansion of the waste rock stockpiles must be in accordance with relevant approvals from the New Mexico Mining and Minerals Division (MMD) pursuant to the New Mexico Mining Act and any appropriate federal land management agency (e.g., Bureau of Land Management).

C102 Tanks, Pipelines, Sumps and Other Containment Systems

A. Design, construction and location of all new pipelines, tanks, and sumps shall be in accordance with this Discharge Permit, and applicable requirements of Subsections A and B of 20.6.7.23 NMAC and Paragraph (2) of 20.6.7.17.C NMAC.

B. Operation of all pipelines and tanks in existence on the effective date of the Copper Mine Rule shall be in accordance with the applicable requirements of Subsection C of 20.6.7.23 NMAC.

C. Detailed and complete construction plans and specifications and supporting design calculations for any proposed or required tanks, pipelines, sumps or other containment including any replacements thereof, shall be submitted to NMED pursuant to Paragraph (2) of 20.6.7.17.C NMAC and Section 20.6.2.23 NMAC, and D107 of this Discharge Permit. This requirement does not apply to portable or temporary tanks, pipelines, sumps, or other containment systems that are subject to periodic relocation during mining operations.

D. Pursuant to Subsection J of 20.6.7.33 NMAC, upon discontinuing the operation of, or before moving tanks, pipelines, sumps, or other containment systems, all liquids shall be released to a location specifically authorized in a discharge permit, an alternate location subject to NMED approval, or otherwise properly contained, transferred, or disposed of in a manner that does not result in discharge to non-authorized areas.

C103 Impoundments

A. The permittee shall operate the 1X1 Lined Pond in accordance with the applicable requirements of Subsection F of 20.6.7.18 NMAC.

B. Design, construction, and location of all new impoundments shall be in accordance with the Discharge Plan, and applicable requirements of Subsection D of 20.6.7.17 NMAC.

C. Operation of all impoundments shall be in accordance with the applicable requirements of Subsection F of 20.6.7.18 NMAC.

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D. Pursuant to Subsection B of 20.6.7.18 NMAC, the permittee shall submit a construction certification report within 120 days of construction completion of all new impoundments that require a liner system.

C104 Stormwater Management

A. Stormwater shall be managed in accordance with the applicable requirements of Paragraph (4) of 20.6.7.17.C NMAC, and in accordance with the approved Sitewide Water Management Plan required to be updated annually pursuant to Condition C105 of this Discharge Permit. Previously submitted documents that address stormwater management and will be included as components of the Sitewide Water Management Plan include the Stormwater Handling Plan/Emergency Response Plan included as Appendix D in the TMD and the Interim Emergency Water Management Plan dated September 1, 2016.

B. To ensure compliance with 20.6.7.17.D(2) NMAC, the permittee shall inspect all stormwater impoundments, conveyance channels and collection ponds on a quarterly basis and as soon as practicable after precipitation events exceeding one-inch in 24 hours for evidence of excessive sediment buildup and stormwater accumulation that exceeds design capacity or intended function of the facility. Facilities to be inspected following 24-hour one-inch precipitation events would be determined by the nearest appropriate rain gauge(s).

C105 Updated Sitewide Water Management Plan

A. The permittee shall submit annually an updated Sitewide Water Management Plan that meets the requirements of Paragraph (4) of Section 20.6.7.14.C NMAC (Stormwater Management Plan), Subsection C if 20.6.7.24 NMAC (Mine Operations Water Management Plan) and Subsection K of 20.6.7.30 NMAC (Emergency Water Management Plan). The update shall be submitted to NMED by May 31 of each year.

C106 Dust Suppression

A. If at some time in the future the permittee decides to use an alternate source of dust suppression, the permittee shall notify NMED for approval prior to the change.

C107 Flow Measurement

A. Pursuant to Paragraph (2) of 20.6.7.18.E NMAC, the permittee shall visually inspect all flow meters monthly for evidence of malfunction and repair or replace

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malfunctioning flow meters within 30 days of or as soon as practicable following discovery.

C108 Monitoring and Reporting

A. Pursuant to applicable requirements of Sections 20.6.7.28 and 20.6.7.29 NMAC, the permittee shall collect, preserve, transport, analyze, and report all groundwater, surface water, seepage water, and process water from the facility in accordance with the NMED-approved facility monitoring plan titled Sampling and Analysis Plan, DP-1236, Little Rock Mine (SAP) dated May 21, 2020, and any additional requirements listed in this Discharge Permit. Table 1 provides a summary of monitoring and reporting requirements.

B. The permittee shall submit monitoring reports to NMED in both electronic and hard copy format on a semi-annual schedule that contain all quarterly monitoring data and information collected pursuant to the requirements of this Discharge Permit, and the applicable requirements of Section 20.6.7.29 NMAC. Semi-annual reports are due by February 28 and August 31 of each year. If applicable to this Discharge Permit, data required to be submitted annually data shall be submitted in the monitoring report due by February 28 of each year.

C. Requests to change monitoring and reporting requirements may require modification or amendment of the Discharge Permit as required by the NMED Secretary. [20.6.2.7 NMAC]

D. Groundwater

1. Pursuant to Subsection B of 20.6.7.28 NMAC, the permittee shall monitor groundwater quality as close as practicable around the perimeter and downgradient of the Little Rock Open Pit.

2. Pursuant to Paragraph (1) of 20.6.7.28.B NMAC, the existing monitoring wells listed in Table 1 attached to this Discharge Permit have been deemed appropriate by NMED for continued use as groundwater monitoring wells. These groundwater monitoring wells, installed prior to the effective date of the Copper Mine Rule, have been identified to be located and constructed in accordance with the Copper Mine Rule.

3. Pursuant to Subsection G of 20.6.7.28 NMAC, the permittee shall collect and analyze groundwater from the monitoring wells in accordance with Table 1, and applicable requirements of Subsection F of 20.6.7.28 NMAC. Analytical

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results shall be submitted in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.

4. During operations the permittee shall evaluate on an annual basis the effectiveness of pit dewatering on capturing groundwater impacted by the reclaimed Copper Leach Stockpile. The evaluation shall include interpretation of water quality and water level data from the surrounding monitoring wells, a potentiometric surface map with ground surface contours, groundwater flow lines and an assessment of pit capture. The results shall be reported in the semi-annual report due by February 28 of each year.

5. Pursuant to Subsection L of 20.6.7.28 NMAC the permittee shall submit to NMED groundwater elevation contour maps semiannually and open pit surface drainage area maps annually for the Little Rock Mine. The maps shall be of appropriate scale, shall include land surface topographic contours with appropriate contour intervals, and shall include the monitoring wells that the groundwater data is based on.

E. Surface Water

1. The surface water collection ports located in Deadman Canyon and in California Gulch shall be checked after each precipitation event of 1.0 inch or greater. If sufficient water is present a sample shall be collected and analyzed. The permittee shall attempt to collect samples from the collection ports as soon as practicable after the precipitation event. No more than one surface sample per port may be collected in a 24-hour period, and no more than two surface water samples per port are required to be collected per quarter. Samples shall be analyzed for the parameters provided in the SAP dated May 21, 2020. Sampling results shall be reported in the semi-annual reports due on February 28 and August 31 of each year.

2. The permittee shall collect samples from the Little Rock Open Pit bottom sump in the first and third quarter of each year for analyses in accordance with Table 1, and applicable requirements of Subsection F of 20.6.7.28 NMAC. Analytical results shall be submitted in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.

3. The permittee shall notify NMED in writing a minimum of two weeks prior to the anticipated destruction or removal of any surface water collection port required pursuant to DP-1236. In the event of unintentional destruction or damage requiring abandonment, the permittee shall notify NMED as soon as

possible. The notification shall propose a replacement port location for NMED approval. [20.6.2.3107 NMAC]

F. Seepage Collection Trenches CLDS and CLDS-1

1. The permittee shall perform quarterly inspections of seepage collection trenches CLDS and CLDS-1 and perform maintenance as necessary to ensure that the seepage collection trenches are managed in a manner that is protective of groundwater quality. Pursuant to the applicable requirements of Subsection H of 20.6.7.29 NMAC the inspection results and any maintenance performed shall be reported in the annual monitoring ad evaluation report due on February 28 of each year as required in Section C108.B.

G. Discharge Volumes

1. The permittee shall measure and report the following discharge volumes in semi-annual monitoring reports pursuant to Subparagraphs (g) and (h) of 20.6.7.20.C(1) NMAC and Subsections E and F of 20.6.7.29 NMAC using appropriate metering devices and/or calculation methods.

   a. The monthly volume of stormwater and impacted groundwater pumped from the Little Rock Open Pit sump. Meter readings shall be recorded at intervals no less than once per week and shall be reported in the semi-annual monitoring reports required in Section C108.B.

   b. The permittee shall estimate the quarterly volume of seepage that discharges into the Seepage Collection Trenches. Due to the relatively slow flow rate, the flow rates may be estimated. The estimated flow rates shall be reported in the monitoring report due on February 28 of each year as required in Section C108.B.

   c. The monthly volume of fluids pumped from the 1X1 Lined Pond. Meter readings shall be recorded at intervals no less than once per week and shall be reported in the semi-annual monitoring reports required in Section C108.B.

H. Flow Measurement

1. Pursuant to Subparagraph (a) of 20.6.7.18.E(2) NMAC, the permittee shall submit a report of repaired or replaced flow meters in the semi-annual monitoring reports that include a description of any flow meter malfunctions with a statement verifying the repair and description of calibration of the flow meter pursuant to Paragraph (3) of 20.6.7.18.E NMAC.

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I. Meteorological Data

1. Meteorological data shall be measured as stipulated in the TMD. The data shall be submitted to NMED in the monitoring report due on February 28 of each year as specified by C108.B.

C109 Contingency Plan

A. The permittee shall comply with all applicable contingency requirements and submit to NMED all applicable information or documentation specified by Subsections A through J of 20.6.7.30 NMAC.

B. Pursuant to Subsection G of 20.6.7.30 NMAC, discharges of process water or seepage liquids not approved by this Discharge Permit that exceed the standards of Section 20.6.2.3103 NMAC must be reported under Section 20.6.2.1203 NMAC and as required by D106.

C. Pursuant to Subsection I of 20.6.7.30 NMAC, the permittee shall notify NMED of any significant erosion or condition that may compromise conveyance structures utilized in DP-1236.

D. If NMED or the permittee identifies any other failures of the discharge plan or system not specifically noted in this permit, NMED may require the permittee to develop and submit contingency plans and schedules for NMED approval to address such failures. [20.6.2.3107.A.10 NMAC]

C110 Closure Plan

A. Closure of facilities regulated under DP-1236 shall be performed in accordance with the applicable requirements of Section 20.6.7.33 NMAC and Section 20.6.7.34 NMAC, and in accordance with the approved Little Rock Mine Updated Closure/Closeout Plan, including NMED, MMD and any required federal agency approval.

B. Pursuant to Paragraph (4) Subsection F of 20.6.7.33 NMAC and Subsection F of 20.6.7.34 NMAC, the permittee shall submit for NMED approval 60 days prior to construction, a Construction Quality Assurance/Construction Quality Control (CQA/CQC) plan for any mine units regulated pursuant to DP-1236 where cover is applied under an approved closure plan.

C. For each mine unit closed, the closure period shall cease, and the post-closure period shall commence following the permittee's submission and NMED approval of a final CQA/CQC report.

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D. Post-Closure Requirements

1. The permittee shall perform post-closure monitoring until NMED determines that post-closure monitoring is no longer required. The financial assurance described in C111 shall provide for a minimum of 100 years of post-closure monitoring.

2. Post-closure requirements shall be performed in accordance with the applicable requirements of Section 20.6.7.35 NMAC. Pursuant to Subsection D of 20.6.7.35 NMAC, the permittee shall submit to NMED semi-annual reports pursuant to the schedule in Subsection A of 20.6.7.29 NMAC. Pursuant to Subsections B and C of 20.6.7.29 NMAC, the semi-annual reports shall include, but are not limited to, a description and the results of post-closure monitoring, any work completed during the preceding semi-annual period, any maintenance and repair work conducted for any closure unit, status of post-closure activities, and semi-annual potentiometric maps.

3. Pursuant to Subsection E of 20.6.7.35 NMAC, the contingency requirements of Section 20.6.7.30 NMAC apply to any deficiencies discovered during the post-closure monitoring and inspections, including, but not limited to, the requirements for possible corrective action plans, abatement plans, monitoring well replacement, reporting and correction of unauthorized discharges, and significant erosion of, or ponding of water on, a cover system.

C111 Financial Assurance

A. The permittee shall maintain the existing and any revised joint financial assurance with NMED and the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department to cover costs associated with closure and post-closure activities in accordance with the applicable requirements of Sections 20.6.7.33 and 20.6.7.35 NMAC, and in accordance with the Little Rock Mine Updated Closure/Closeout Plan. [20.6.2.3107 NMAC]

Part D GENERAL CONDITIONS

General conditions issued by the Ground Water Quality Bureau pursuant to 20.6.2 NMAC and 20.6.7 NMAC are listed below.

D100 Enforcement

A. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities,

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or any refusal or failure to provide NMED with records or information, may subject the permittee to a civil enforcement action pursuant to the NMSA 1978, Section 74-6-10(A) and (B). Such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the discharge permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to the NMSA 1978, Section 74-6-10(C) and 74-6-10.1, civil penalties of up to $15,000 per day of noncompliance may be assessed for each violation of the NMSA 1978, Section 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to $10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. The permittee does not waive any argument as to the weight such evidence should be given. [NMSA 1978 Section 74-6-10, Section 74-6-10.1]

B. Pursuant to the NMSA 1978, Section 74-6-10.2(A-F), criminal penalties may be assessed for any person who knowingly violates or knowingly causes or allows another person to:

1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted, or required to be maintained under the WQA;

2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or

3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation.

D101 General Inspection and Entry Requirements

A. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]

B. The permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:

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1. Enter at regular business hours or at other reasonable times upon the permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.

2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.

3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation.

4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

D102 General Operational Requirements

A. New mine units shall be designed in accordance with the applicable requirements of Section 20.6.7.17 NMAC.

B. Mine units shall be operated in accordance with the applicable requirements of Section 20.6.7.18 NMAC.

   1. Pursuant to Subsection A of 20.6.7.18 NMAC, to the extent practicable, mine units shall be deigned and operated in a manner that contemplates the closure plan, including identifying and segregating suitable material to construct covers and consideration of closure grading and drainage plans in the design and construction f operational mine units.

C. The permittee shall meet all applicable setback requirements for any new mine units pursuant to Section 20.6.7.19 NMAC.

D. The permittee shall provide written notice to NMED of the commencement, or recommencement of operations in accordance with Subsection C of 20.6.7.18 NMAC.

D103 General Record Keeping and Reporting Requirements

A. The permittee shall retain written records at the copper mine facility as required pursuant to Section 20.6.7.37 NMAC.

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B. The permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, NMSA 1978, 74-6-9 (B) & (E)]

D104 General Sampling and Analytical Methods

A. Unless otherwise approved in writing by NMED, the permittee shall conduct sampling and analysis in accordance with the most recent edition of the following documents [Subsection B of 20.6.2.3107 NMAC]:

1. American Public Health Association, Standard Methods for the Examination of Water and Wastewater (18th, 19th or current)

2. U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste

3. U.S. Geological Survey, Techniques for Water Resources Investigations of the U.S. Geological Survey

4. American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31. Water

5. U.S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition

6. Federal Register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations

7. Methods of Soil Analysis: Part 1. Physical and Mineralogical Methods; Part 2. Microbiological and Biochemical Properties; Part 3. Chemical Methods, American Society of Agronomy

D105 Monitoring Well Abandonment

A. The permittee shall submit a written request for NMED approval to amend or modify this Discharge Permit at least 30 days prior to the anticipated destruction or removal of any monitoring wells required under this Discharge Permit. Monitoring well plugging and abandonment shall be completed in accordance with the Groundwater Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011, or according to regulations

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issued by the Office of the State Engineer in 19.27.7 NMAC, unless an alternate method is approved by NMED. [20.6.2.3107 NMAC]

B. The request required in D105.A shall include the following information:

1. A scaled map showing the location of the monitoring well(s) and the mine units it is intended to monitor;

2. The purpose for plugging and abandoning the monitoring well(s);

3. Details, if available, on the monitoring well(s) including depth-to-water elevation, top-of-casing elevation, construction and lithologic logs;

4. Recent groundwater analytical results from the monitoring well(s);

5. Proposed replacement well(s), if applicable, and;

6. Same details, as applicable, as provided in D105.B.1, D105.B.3, and D105.B.4 are required for the proposed replacement monitoring well(s). New replacement wells require monitoring well completion reports pursuant to Subsection K of 20.6.7.28 NMAC.

D106 Reporting Requirements for Unauthorized Discharges

A. In the event of a spill or release that is not authorized under this permit, the permittee shall initiate the notifications and corrective actions as required in 20.6.2.1203. The permittee shall take immediate corrective action to contain and remove or mitigate any damage caused by the discharge. Within 24 hours after discovery of the discharge, the permittee shall verbally notify NMED and provide the information required by Paragraph (1) of 20.6.2.1203.A NMAC, and to determine applicable monitoring and reporting requirements pursuant to Paragraphs (2) and (3) of 20.6.7.29.B NMAC. Within 7 days of discovering of a discharge reportable under 20.6.2.1203 NMAC, the permittee shall submit a written report to NMED verifying the oral notification and providing any additional information or changes. The permittee shall submit a corrective action report within 15 days after discovery of the discharge. [20.6.2.1203]

B. As part of the 24-hour spill notification requirements, the permittee shall submit a figure to NMED by the end of the next business day that clearly displays the location (or locations) of the spill and identifies nearby mine units and/or location information in latitude/longitude coordinates in decimal degrees (XX.XXXXXX and -XXX.XXXXXX, respectively), using a specified datum of WGS84. Submittal of

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location information in Universal Transverse Mercator (UTM) format is also acceptable.

D107 Modifications and Amendments

A. The permittee shall notify and obtain approval from NMED of a proposed change to the facility or the facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the facility, prior to implementing such changes. Such changes may require modification or amendment to this Discharge Permit, including payment of applicable fees as specified in Section 20.6.7.9 NMAC. [20.6.2.3107.C NMAC, 20.6.2.3109.E NMAC, 20.6.7.7.B(19) NMAC, 20.6.7.14 NMAC]

B. As determined by NMED, for any proposed change that would meet the definition of a discharge permit modification as specified in Paragraph P of 20.6.2.7 NMAC the permittee shall submit for NMED approval an application for modification of this Discharge Permit pursuant to Section 20.6.7.10 NMAC and 20.6.7.11 NMAC. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.

C. As determined by NMED, for any proposed change that meets the definition of a discharge permit amendment as specified in Paragraph 19 of 20.6.7.7.B NMAC, the permittee shall submit a request to NMED for amendment of this Discharge Permit pursuant to Section 20.6.7.14 NMAC of the Copper Mine Rule. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.

D. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a discharge permit modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and that more stringent requirements are needed to protect groundwater quality.

D108 Compliance with Other Laws

A. Nothing in this Discharge Permit shall be construed in any way as relieving the permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders. [20.6.2 NMAC, 20.6.7.8(D) NMAC]

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Table 1
Monitoring and Reporting Summary for DP-1236

Monitoring Report Schedule of Submittal (Subsection A of 20.6.7.29 NMAC)						
1	January 1st through June 30th (Q1 and Q2 sampling quarters) – Semi-annual Report due by August 31stof each year.					
2	July 1 through December 31 (Q3 and Q4 sampling quarters) – Semi-annual Report due by February 28th of each year.					
3	Annual Reports Due by February 28th of each year					
Reporting Summary						
Annual Reporting Frequency	**Number of Sites**	**Description**				
2	17	All applicable requirements of Subsection A through C and E though H of 20.6.7.29 NMAC				
1	NA	OPSDA Map				
Monitoring Schedule						
Identification	**Sampling**				**Notes**	
	Q1	**Q2**	**Q3**	**Q4**		
Regional Monitoring Wells						
LRW-4	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
LRW-3	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2012-01	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-01	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-02	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-03	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-04	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-05	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
1236-2016-06	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
Seepage Collection Systems						
CLDS	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3		
CLDS-1	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3		
Other Monitoring Location						
1X1 Lined Pond	-	Groups 1, 2, 3	-	Groups 1, 2, 3		
Surface Water Locations						
Little Rock Pit Bottom	Groups 1, 2, 3	-	Groups 1, 2, 3	-	Temporary Sump	
Little Rock Flow Sampler-1	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Located in California Gulch	
Little Rock Flow Sampler 4	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Located in California Gulch	
Deadman Flow Sampler North	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Located in Deadman Canyon	
Deadman Flow Sampler South	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Groups 1, 2, 3	Located in Deadman Canyon	

Sampling Analytical Suites:
Group 1 = Field Parameters: temperature, pH, and water level (if applicable).
Group 2 = General Chemistry: alkalinity-bicarbonate, alkalinity-carbonate, alkalinity-total, boron, calcium, chloride, fluoride, magnesium, potassium, sodium, sulfate, and total dissolved solids (TDS).
Group 3 = Metals: aluminum, arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, selenium, and zinc.
All samples are analyzed for dissolved constituents. Samples collected at the surface water samplers, Little Rock pit bottom, and 1X1 Lined Pond are also analyzed for total constituents.

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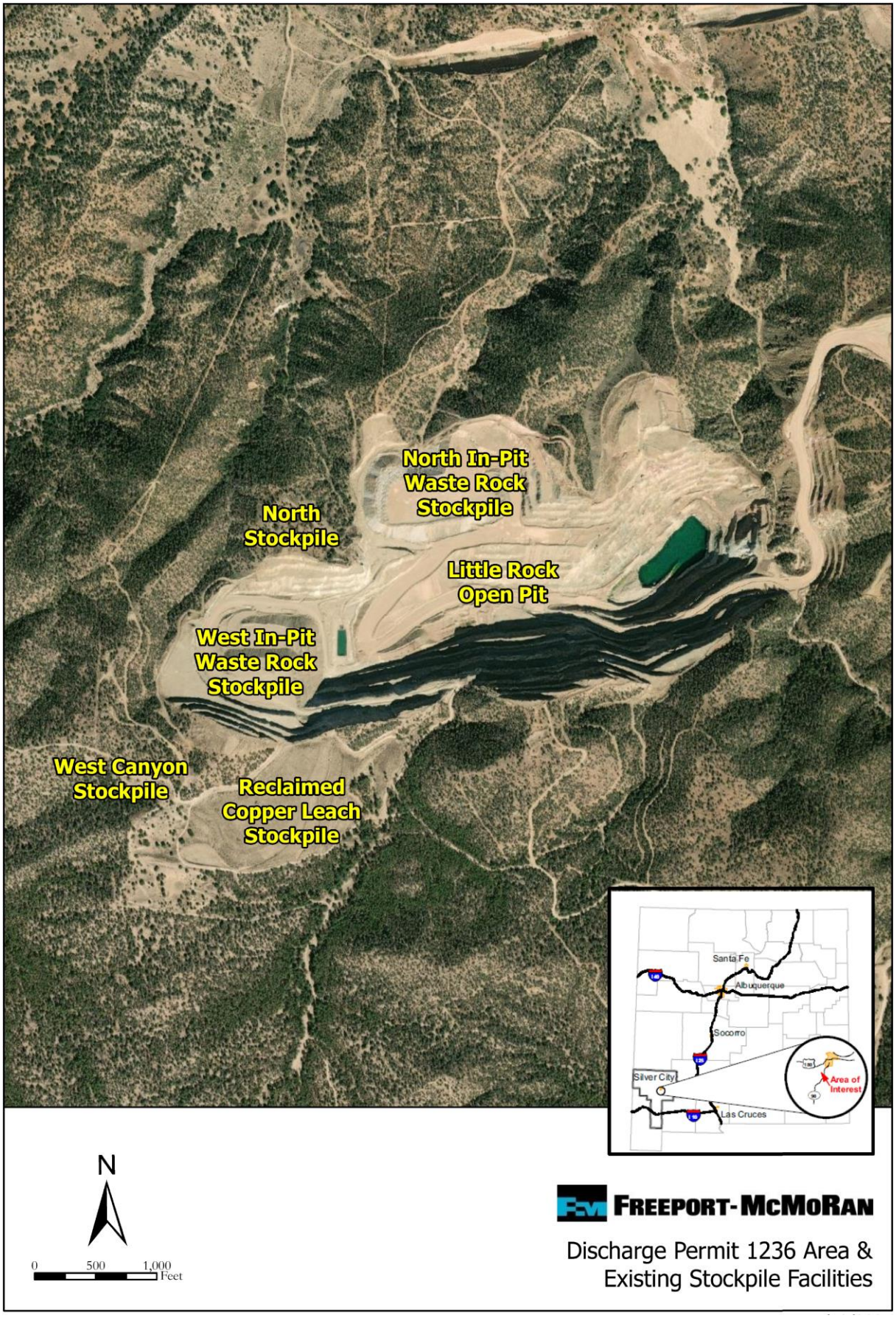

Figure 1 Existing DP-1236 Mine Units

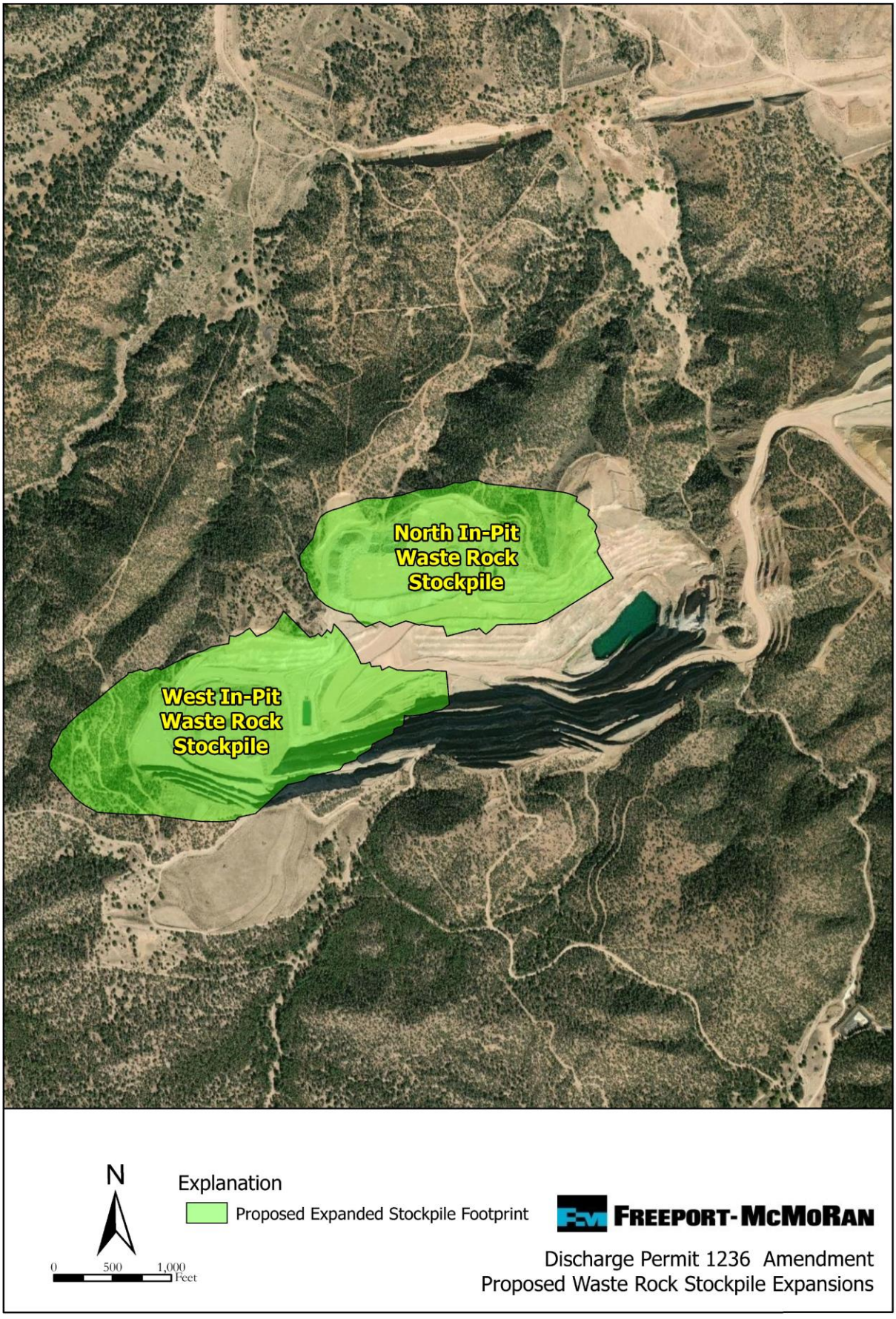

Figure 2 Expanded North In-Pit and West In-Pit Waste Rock Stockpiles

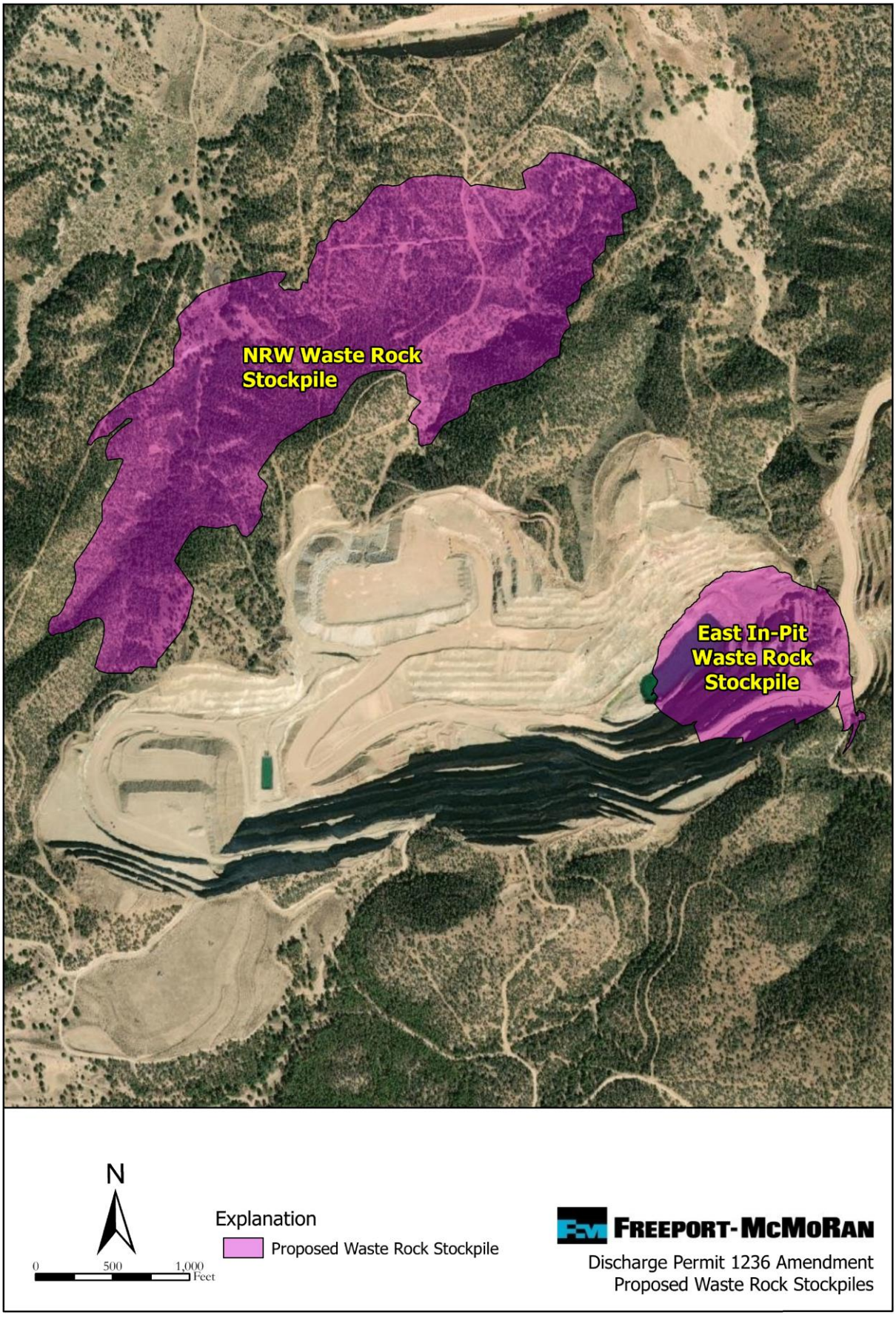

Figure 3 NRW and East In-Pit Waste Rock Stockpiles

Figure 4 Northern Haul Road

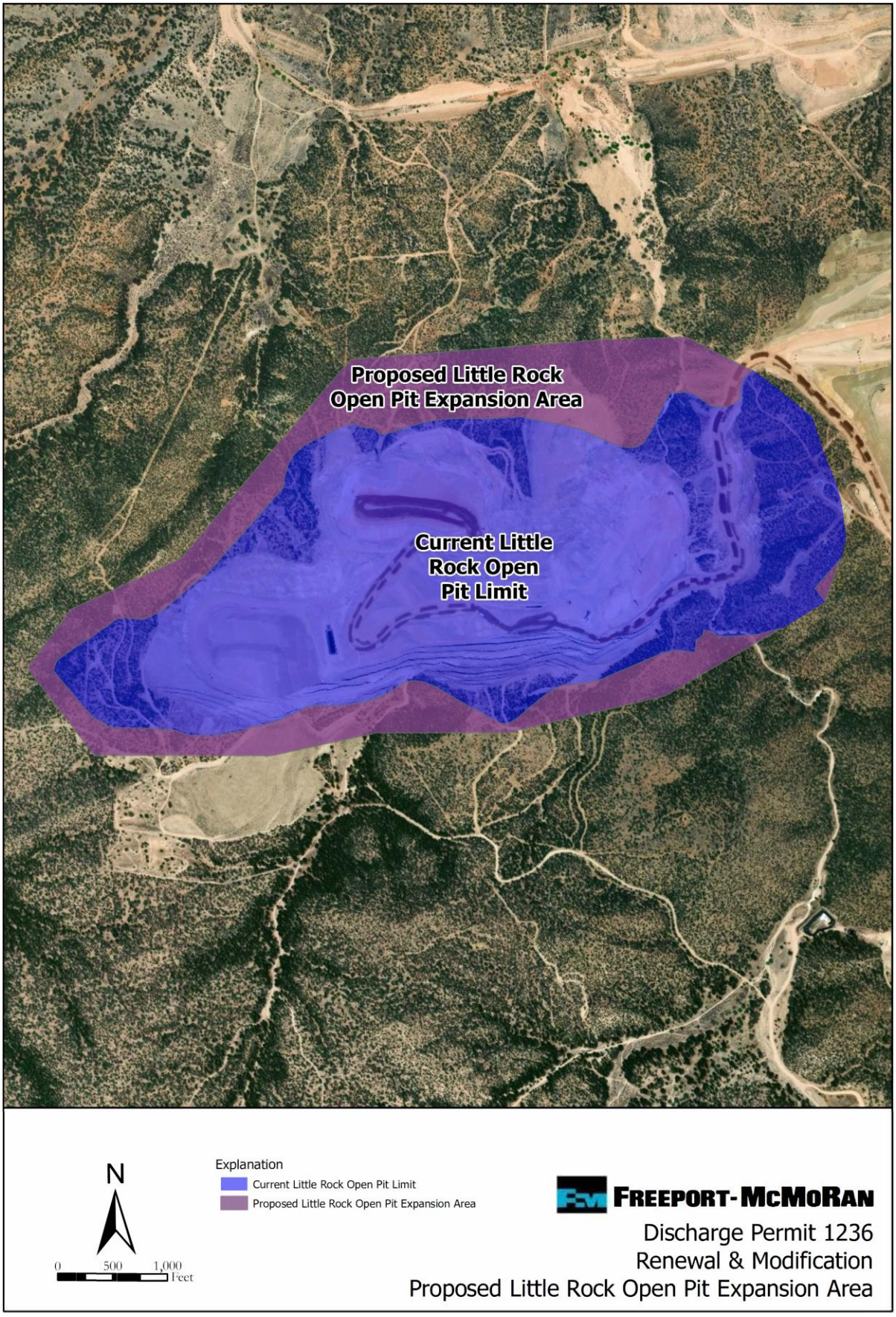

Figure 5 Little Rock Open Pit Expansion Area

Figure 6 Copper Leach Stockpile Collection Trenches